THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant(s):	Hansen et al.
Appl. No.:	10/824,376
Conf. No.:	6618
Filed:	April 15, 2004
Title:	CHOCOLATE FLAVOR MANIPULATION
Art Unit:	1761
Examiner:	Paden, Carolyn A.
Docket No.:	112701-574

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' REPLY BRIEF

Sir:

I. INTRODUCTION

Appellants submit Appellants' Reply Brief in response to the Examiner's Answer dated January 30, 2008 pursuant to 37 C.F.R. § 41.41(a). Appellants respectfully submit the Examiner's Answer has failed to remedy the deficiencies with respect to the Final Office Action dated September 18, 2007 as noted in Appellants' Appeal Brief filed on December 13, 2007 for at least the reasons set forth below. Accordingly, Appellants respectfully request that the rejections of pending Claims 1-20 be reversed.

II. THE REJECTION OF CLAIMS 1-5 AND 11-20 UNDER 35 U.S.C. § 103(a) TO *RIPPER* AND *RUSOFF* SHOULD BE REVERSED BECAUSE THE EXAMINER HAS NOT ESTABLISHED A PRIMA FACIE CASE OF OBVIOUSNESS

Appellants respectfully request that the Board reverse the rejections of Claims 1-5 and 11-20 under 35 U.S.C. §103(a) because there exists no reason why the skilled artisan would combine *Ripper* with *Rusoff* to arrive at the presently claimed subject matter. Moreover, even if combinable, the cited references fail to disclose or suggest all of the claimed elements of the present invention.

a. There exists no reason why the skilled artisan would combine *Ripper* with *Rusoff* to arrive at the presently claimed subject matter because the cited references teach away from the present invention

Appellants respectfully submit that there exists no reason why the skilled artisan would combine *Ripper* with *Rusoff* to arrive at the presently claimed subject matter. Independent Claims 1, 11-13, 16, 18 and 20 recite, in part, a process for manipulating the flavor of a mass of chocolate utilizing a conventional process for manufacturing the chocolate and adding a flavor effective amount of a non-cocoa/dairy flavor to the chocolate. The Specification describes several standard processes or conventional methods of manufacturing chocolate, each of which includes the step of conching. See, Specification, page 1, lines 17-26.

In contrast, *Ripper* is entirely directed to a non-conventional improved process for manufacturing chocolate that does not involve conching. For example, *Ripper* specifically discloses that "[t]raditionally, quality chocolate is manufactured by mixing the chocolate-making ingredients together, and refining and then conching the resultant mixture." See, *Ripper*, page 1, lines 7-10. After describing in detail the conching process and stating that the traditional methods of manufacturing chocolate are expensive, *Ripper* then states "[i]t is an object of the present invention to provide an improved method which is relatively simple and quick." See, *Ripper*, page 1, lines 40-50. Moreover, *Ripper* specifically replaces the conching step with the use of a scraped heat exchanger. See, *Ripper*, page 1, lines 81-85. Thus, one of ordinary skill in the art would understand that *Ripper* is an improved method over conventional techniques for

manufacturing chocolate and teaches away from using a conching step as required, in part, by the present claims.

The Examiner asserts that *Ripper* does not teach away from the present invention because *Ripper* was patented in 1980 and therefore must have been either traditional or conventional at the time Appellants' application was filed in 2001. See, Examiner's Answer, page 10, lines 9-10. However, Appellants respectfully submit that the passage of time alone does not render a method "conventional." In construing the claim term "conventional," courts look to the dictionary definitions of conventional. *Kopykake Enters. v. Lucks Co.*, 264 F.3d 1377, 1382 (Fed. Cir. 2001). "Dictionary definitions of 'conventional' include 'according with, sanctioned by, conforming to, or based on convention, custom, or traditional usages or attitudes; established and sanctioned by general agreement and usage; lacking spontaneity, originality or individuality.'" *Id.* (citing Webster's Third New International Dictionary 498 (1968)). The mere fact that a method is old does not necessarily mean that it is traditionally or generally used. In fact, the Examiner has cited nothing establishing that, at the time Appellants' application was filed in 2001, the chocolate manufacturing method of *Ripper* was "based on convention or traditional usage" or was "sanctioned by general agreement and usage."

However, the Specification describes traditional or generally used methods of manufacturing chocolate as including a conching step. For example, the Specification expressly states that "[c]hocolate is generally obtained by mixing sugar and cocoa butter with cocoa liquor or cocoa nibs, followed by refining, conching and tempering." See, Specification, page 1, lines 17-19. The Specification further describes other "traditional" methods of manufacturing chocolate as involving "refining, conching and tempering." See, Specification, page 1, lines 20-26. Thus, although the Specification does not explicitly define "conventional methods" of manufacturing chocolate, if the claim term "conventional" is given its ordinary meaning, a "conventional method" of manufacturing chocolate must include a conching step. As *Ripper* is entirely directed to an improved method for manufacturing chocolate that does not include conching, *Ripper* teaches away from the present claims.

Rusoff also teaches away from the present claims. Independent Claims 1, 11-13, 16, 18 and 20 recite, in part, a process for manipulating the flavor of a mass of chocolate by adding a flavor effective amount of a non-cocoa/dairy flavor to the chocolate. Similarly, independent Claims 14 and 15 recite, in part, a chocolate product containing a flavor effective amount of a

non-cocoa/dairy flavor. The Specification expressly states that the non-cocoa/dairy flavor is "a non-cocoa and/or milk/dairy consumer-recognizable flavor attribute associated with chocolate, and not a non-chocolate flavor for the mere enhancement of the chocolate flavor." See, Specification, page 2, lines 30-32. Moreover, the desired non-cocoa dairy flavor is added to the chocolate mass in order to manipulate the flavor of the chocolate. See, Specification, page 2, lines 24-30.

In contrast, *Rusoff* is entirely directed to an artificial chocolate flavor that acts as either "a substitute for natural chocolate flavor or a fortifier or extender of natural chocolate flavor." See, *Rusoff*, column 4, lines 47-49. As the Examiner admits, one of ordinary skill in the art would use the flavor of *Rusoff* to "boost the flavor of chocolate." See, Examiner's Answer, page 10, lines 16-17. Unlike the non-cocoa dairy flavor of the present claims, the entire purpose of the flavor of *Rusoff* is to enhance or boost chocolate flavor. See, *Rusoff*, column 1, lines 33-35; column 4, lines 43-56. Thus, *Rusoff* teaches away from a non-cocoa/dairy flavor in accordance with the present claims.

Furthermore, the artificial chocolate flavor of *Rusoff* is intended as a substitute or replacement for natural chocolate produced by cocoa. See, *Rusoff*, column 1, lines 17-35. In order to lower production costs, the artificial flavor of *Rusoff* eliminates the need for natural chocolate produced from cocoa. See, *Rusoff*, column 1, lines 27-35. *Rusoff* is entirely directed to avoiding the use of a natural chocolate mass in favor of a soluble, powdered artificial flavor. See, *Rusoff*, column 1, lines 27-35; column 4, lines 44-47. Therefore, *Rusoff* teaches away from manipulating the flavor of a mass of chocolate by adding a non-cocoa/dairy flavor to the chocolate as required, in part, by the present claims.

The Examiner alleges that it would be obvious to one of ordinary skill in the art to utilize the artificial chocolate and dairy flavors of *Rusoff* to modify the flavor of the chocolate in *Ripper*. See, Examiner's Answer, page 10, lines 11-13 and 18; page 11, lines 1-2. However, as the Examiner acknowledges, a skilled artisan would only look to *Rusoff* "to boost the flavor of chocolate without expending valuable chocolate resources." See Examiner's Answer, page 10, lines 16-18. The artificial flavor of *Rusoff* eliminates the need for natural chocolate produced from sources such as cocoa. See, *Rusoff*, column 1, 27-35. Because *Ripper* discloses a method of manufacturing chocolate from cocoa, see, *Ripper*, page 1, lines 5-14, Applicants respectfully

submit that one of ordinary skill in the art would have no reason to utilize the artificial flavor of *Rusoff* to manipulate the flavor of the natural chocolate mass in *Ripper*.

b. Even if combinable, the cited references fail to disclose or suggest every limitation of the presently claimed subject matter

Appellants also respectfully submit that, even if combinable, *Ripper* and *Rusoff* fail to disclose each and every limitation of the presently claimed subject matter. For example, the cited references fail to disclose or suggest adding an appropriate non-cocoa/dairy flavor attribute to a chocolate mass as required, in part, by independent Claims 1, 11-16, 18 and 20. The Specification expressly defines the non-cocoa/dairy flavor as "a non-cocoa and/or milk/dairy consumer-recognizable flavor attribute associated with chocolate, and not a non-chocolate flavor for the mere enhancement of the chocolate flavor." See, Specification, page 2, lines 30-32.

Because the Examiner admits that *Ripper* does not disclose adding a non-cocoa/dairy flavor to a chocolate mass, the Examiner relies on *Rusoff* to disclose the required flavors. See, Final Office Action dated October 30, 2006, page 5, lines 4-8. However, as discussed previously, the artificial flavor of *Rusoff* merely enhances chocolate flavor. Thus, both *Ripper* and *Rusoff* fail to disclose or suggest a non-cocoa dairy flavor in accordance with the present claims.

The Examiner asserts that non-cocoa dairy flavors are suggested in *Ripper* because "chocolate is well known in the art to be flavored with non-cocoa/dairy flavors" and "[v]anilla and fruit flavors a[re] known in the art to be used in chocolate formulations." See, Examiner's Answer, page 11, lines 3-6. However, in a previous Office Action, the Examiner specifically considered Appellants' argument that *Ripper* does not disclose adding a non-cocoa/dairy flavor to the chocolate and stated that the argument was not persuasive "because the rejection is not based on *Ripper* alone. The rejection relies on *Rusoff* to include the required flavors." See, Final Office Action dated October 30, 2006, page 5, lines 4-8. Moreover, the Examiner cites no support in *Ripper* for the claimed requirement of adding non-cocoa/dairy flavors to a chocolate mass. Therefore, the cited references fail to disclose or suggest adding a non-cocoa/dairy flavor to a chocolate mass as required, in part, by the present claims.

For at least the reasons discussed above, one of ordinary skill in the art would have no reason to combine the cited references, and the cited references do not teach, suggest, or even disclose all of the elements of Claims 1-5 and 11-20. Therefore, Appellants respectfully submit that Claims 1-5 and 11-20 are novel, nonobvious and distinguishable from the cited references and are in condition for allowance.

III. THE REJECTION OF CLAIMS 1-4, 6 AND 10-20 UNDER 35 U.S.C. § 103(a) TO *RIPPER* AND *KLEINERT* OR *WATTERSON* SHOULD BE REVERSED BECAUSE THE EXAMINER HAS NOT ESTABLISHED A PRIMA FACIE CASE OF OBVIOUSNESS

Appellants respectfully request that the Board reverse the rejections of Claims 1-4, 6 and 10-20 under 35 U.S.C. §103(a) because there exists no reason why the skilled artisan would combine *Ripper* with either *Kleinert* or *Watterson* to arrive at the presently claimed subject matter. Moreover, even if combinable, the cited references fail to disclose or suggest all of the claimed elements of the present invention.

a. There exists no reason why the skilled artisan would combine *Ripper* with *Kleinert* or *Watterson* to arrive at the presently claimed subject matter because the cited references teach away from the present invention

Appellants respectfully submit that there exists no reason why the skilled artisan would combine *Ripper* with *Kleinert* or *Watterson* to arrive at the presently claimed subject matter. Independent Claims 1, 11-13, 16, 18 and 20 recite, in part, a process for manipulating the flavor of a mass of chocolate utilizing a conventional process for manufacturing the chocolate and adding a flavor effective amount of a non-cocoa/dairy flavor to the chocolate. The Specification describes several standard processes or conventional methods of manufacturing chocolate, each of which includes the step of conching. See, Specification, page 1, lines 17-26.

In contrast, *Ripper* and *Kleinert* teach away from the present claims. As discussed previously, a conventional method of manufacturing chocolate in accordance with the present claims must include conching, and *Ripper* is entirely directed to an improved method of

manufacturing chocolate that eliminates the costly step of conching. See, *Ripper*, page 1, lines 43-50. *Kleinert* is similarly directed to a "new and improved" process for manufacturing chocolate that replaces conching with a less costly alternative. See, *Kleinert*, column 1, lines 1-2 and 10-13. *Kleinert* specifically teaches that its improved manufacturing method makes it "possible to dispense with the conventional techniques for finally refining or finishing the chocolate mass, that is to say, by conching." See, *Kleinert*, column 1, lines 10-13. Thus, *Kleinert* teaches away from a chocolate mass manufactured by conventional methods as required, in part, by the present claims.

Kleinert and *Watterson* also teach away from the non-cocoa/dairy flavors of the present claims. Independent Claims 1, 11-16, 18 and 20 recite, in part, adding an appropriate non-cocoa/dairy flavor attribute to a chocolate mass. The Specification defines the non-cocoa/dairy flavor as "a non-cocoa and/or milk/dairy consumer-recognizable flavor attribute associated with chocolate, and not a non-chocolate flavor for the mere enhancement of the chocolate flavor." See, Specification, page 2, lines 30-32. For example, such non-cocoa/dairy flavor attributes may include roasted, sweet, bitter, crumb, caramel, fruity, floral, biscuit, bouquet, spicy, scented, baked, bready, cereal, popcorn, malty, astringent and praline. See, Specification, page 2, lines 9-11.

In contrast, *Kleinert* fails to disclose non-cocoa dairy flavors in accordance with the present claims. For example, the only flavor disclosed in *Kleinert* is a carbohydrate-protein-additive-mixture that is added to the chocolate. See, *Kleinert*, column 3, lines 12-65. However, the mixture can be "at least partially derived from cocoa or cocoa products." See, *Kleinert*, column 3, lines 14-17. Although milk can be added to the mixture in the case of milk chocolate, see, *Kleinert*, column 3, lines 36-38, nothing in *Kleinert* discloses or suggests that the mixture is a milk flavor. Thus, *Kleinert* teaches away from a non-cocoa/dairy flavor as required, in part, by the present claims.

Moreover, *Watterson* is entirely directed to "a means of enhancing the cocoa flavor [of] a fat matrix." See, *Watterson*, Abstract. The purpose of *Watterson* is to enhance the flavor of the chocolate produced from lower-quality cacao beans by adding ingredients to produced an enhanced cocoa product when the beans are roasted. See, *Watterson*, column 3, lines 34-43. Nowhere does *Watterson* disclose or suggest non-cocoa/dairy flavors other than for the mere

enhancement of chocolate flavor. Therefore, one of ordinary skill in the art would understand that *Watterson* teaches away from non-cocoa/dairy flavors in accordance with the present claims.

The Examiner asserts that both *Kleinert* and *Watterson* teach the non-cocoa/dairy flavors of the present claims because they use non-cocoa/dairy ingredients or flavors in the chocolate. See, Examiner's Answer, page 12, lines 3-9. However, as the Examiner admits, the flavors of both *Kleinert* and *Watterson* are used to enhance the cocoa flavor of the chocolate. See, Examiner's Answer, page 12, lines 6-9. Unlike the flavors of *Kleinert* and *Watterson*, the non-cocoa/dairy flavors of the present claims are not for the mere enhancement of the chocolate flavor. See, Specification, page 2, lines 30-32. Thus, the flavors of *Kleinert* and *Watterson* teach away from the non-cocoa/dairy flavors of the present claims.

b. Even if combinable, the cited references fail to disclose or suggest every limitation of the presently claimed subject matter

Appellants also respectfully submit that, even if combinable, *Ripper*, *Kleinert* and *Watterson* fail to disclose each and every limitation of the presently claimed subject matter. For example, the cited references fail to disclose or suggest adding an appropriate non-cocoa/dairy flavor attribute to a chocolate mass as required, in part, by independent Claims 1, 11-16, 18 and 20. The Specification expressly defines the non-cocoa/dairy flavor as "a non-cocoa and/or milk/dairy consumer-recognizable flavor attribute associated with chocolate, and not a non-chocolate flavor for the mere enhancement of the chocolate flavor." See, Specification, page 2, lines 30-32.

The Examiner alleges that the flavors of the present claims are suggested in *Ripper* because it is well-known in the art that non-cocoa/dairy flavors such as vanilla and fruit flavors may be used in chocolate formulations. See, Examiner's Answer, page 12, lines 10-13. However, as clearly stated in the Specification, the non-cocoa/dairy flavors of the present claims are not "for the mere enhancement of the chocolate flavor, e.g. by adding vanilla." See, Specification, page 2, lines 30-32. Therefore, vanilla is not a non-cocoa/dairy flavor in accordance with the present claims. Furthermore, for reasons discussed previously, *Ripper* fails to disclose or suggest the non-cocoa/dairy flavors of the present claims. For example, *Ripper* discloses one proportion of raw ingredients for the manufacture of milk chocolate, whereas the

other proportion of raw ingredients is associated with the manufacture of plain chocolate. See, *Ripper*, page 2, lines 72-105. Thus, the different weight percentages of ingredients are simply altered to enhance the flavor of the chocolate mass, rather than to create a specific consumer-recognizable flavor. For at least these reasons, Appellants respectfully submit that *Ripper* fails to disclose a flavor attribute in accordance with the present claims. As discussed previously, *Kleinert* and *Watterson* also fail to disclose or suggest non-cocoa/dairy flavors other than for the mere enhancement of chocolate. Therefore, the cited references fail to disclose or suggest an appropriate non-cocoa/dairy flavor attribute as required, in part, by the present claims.

For at least the reasons discussed above, one of ordinary skill in the art would have no reason to combine the cited references, and the cited references do not teach, suggest, or even disclose all of the elements of Claims 1-4, 6 and 10-20. Thus, Appellants respectfully submit that Claims 1-4, 6 and 10-20 are novel, nonobvious and distinguishable from the cited references and are in condition for allowance.

Accordingly, Appellants respectfully request that the obviousness rejections with respect to Claims 1-6 and 10-20 be reconsidered and the rejections be withdrawn.

IV. THE REJECTION OF CLAIM 7 UNDER 35 U.S.C. § 103(a) TO *RIPPER*, *RUSOFF* AND *EGGEN* IS RENDERED MOOT IN VIEW OF THE PATENTABILITY OF INDEPENDENT CLAIM 1

Claim 7 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Ripper* in view of *Rusoff* and further in view of *Eggen*. Appellants respectfully submit that the patentability of Claim 1 over *Ripper* and *Rusoff* as discussed previously renders moot the obviousness rejection of Claim 7 that depends from Claim 1. In this regard, the cited art fails to teach or suggest the elements of Claim 7 in combination with the novel elements of Claim 1.

For example, the Examiner relies on *Eggen* only to disclose that the non-cocoa/dairy flavor attribute is an enzymatic hydrolysate of a cocoa polysaccharide. See, Examiner's Answer, page 13, lines 2-5. However, as discussed previously, one of ordinary skill in the art would have no reason to combine *Ripper* and *Rusoff* to arrive at the present invention and, even if combinable, the combination of *Ripper* and *Rusoff* fails to disclose adding an appropriate non-cocoa/dairy flavor that is not a mere chocolate flavor enhancement as required, in part, by Claim

7. Therefore, *Eggen* fails to remedy the deficiencies of *Ripper* and *Rusoff*, and the cited references fail to disclose or suggest every element of Claim 7.

Accordingly, Appellants respectfully request that the obviousness rejection with respect to Claim 7 be reconsidered and the rejection be withdrawn.

V. THE REJECTION OF CLAIMS 8-9 UNDER 35 U.S.C. § 103(a) TO *RIPPER*, *RUSOFF* AND *HANSEN* IS RENDERED MOOT IN VIEW OF THE PATENTABILITY OF INDEPENDENT CLAIM 1

Claims 8-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Ripper* in view of *Rusoff* and further in view of *Hansen*. Appellants respectfully submit that the patentability of Claim 1 over *Ripper* and *Rusoff* as discussed previously renders moot the obviousness rejection of Claims 8-9 that depend from Claim 1. In this regard, the cited art fails to teach or suggest the elements of Claims 8-9 in combination with the novel elements of Claim 1.

For example, the Examiner relies on *Hansen* to disclose that the flavor attributes of Claim 1 are crumb flavor attributes as required, in part, by Claims 8-9. See, Non-Final Office Action dated May 8, 2007, page 7, lines 14-19. However, for reasons discussed above, one of ordinary skill in the art would have no reason to combine *Ripper* and *Rusoff* to arrive at the present invention and, even if combinable, the combination of *Ripper* and *Rusoff* does not disclose manipulating adding an appropriate non-cocoa/dairy flavor that is not a mere chocolate flavor enhancement as required, in part, by Claims 8 and 9. Thus, *Hansen* fails to remedy the deficiencies of *Ripper* and *Rusoff*, and the cited references fail to disclose or suggest every element of the presently claimed invention.

Accordingly, Appellants respectfully request that the obviousness rejection with respect to Claims 8-9 be reconsidered and the rejection be withdrawn.

VI. CONCLUSION

For the foregoing reasons, Appellants respectfully submit that the Examiner's Answer does not remedy the deficiencies noted in Appellants' Appeal Brief with respect to the Final Office Action. Therefore, Appellants respectfully request that the Board of Appeals reverse the obviousness rejection with respect to Claims 1-20.

No fee is due in connection with this Reply Brief. The Director is authorized to charge any fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-574 on the account statement.

Respectfully submitted,

BELL, BOYD & LLOYD LLP

BY _____

Robert M. Barrett
Reg. No. 30,142
Customer No. 29157

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